

tive insecurity of life. In collating this table from the official documents before us, we cannot but remark the extraordinary mortality it evinces at the termination of each decade of man's life from the age of thirty years. In every instance, from thirty years of age and upwards, the mortality in the year which terminates the decade very greatly exceeds that in the preceding and succeeding years; and, as a matter somewhat curious, we shall show these instances:—

| Age.    | Mortality. | Age.    | Mortality. | Age.    | Mortality. |
|---------|------------|---------|------------|---------|------------|
| 29 - -  | 26,630     | 49 - -  | 23,680     | 69 - -  | 33,038     |
| 30 - -  | 31,027     | *50 - - | 33,527     | *70 - - | 53,963     |
| 31 - -  | 23,201     | 51 - -  | 20,911     | 71 - -  | 32,162     |
| 39 - -  | 22,778     | 59 - -  | 25,782     | 79 - -  | 32,162     |
| *40 - - | 33,503     | *60 - - | 43,273     | *80 - - | 45,617     |
| 41 - -  | 20,989     | 61 - -  | 26,084     | 81 - -  | 27,425     |

This strikes us as something extraordinary; it seems to say, that, at these periods, a man is under the influence of some physical change, when he either surrenders or renews his life lease.—*Browning's Domestic and Financial Condition of Great Britain.*

47. *Greater number of still-born in illegitimate than in legitimate births.*—It is well known that unmarried females who become pregnant are much more likely to have still-born children than married women. Professor Joro, in a recent work (*Die Zurechnungs-fähigkeit der Schwangeren und Gebärenden beleuchtet*) states that in Leipzig, in 1835, there were born 1131 legitimate and 249 illegitimate children, of which 45 of the former and 28 of the latter were still-born; being one illegitimate child still-born in 8 25-28 births; and one legitimate child still-born in 25 6-45 births. In 1826 there were born 1135 legitimate and 242 illegitimate, of which 52 of the former and 18 of the latter were still-born; the ratio being in legitimate births one still-born in 21 43-52 births, and in illegitimate one still-born in 13 8-18 births.

48. *Pauper Lunatics and Idiots in England and Wales.*—It is stated in the No. of *Statistical Journal* for October, 1837, that there were in England and Wales 13,667 pauper lunatics and idiots. Of this number 2834 were male lunatics and 3568 female lunatics; 3372 male idiots, and 3393 female idiots. The proportion which the number of pauper lunatics and idiots bears to the population generally, is greater in the agricultural than in the manufacturing and trading districts. Taking the whole population of England, there is one pauper lunatic or idiot for every 1038 persons, and in Wales, one for every 807 persons; and upon the population of England and Wales together there is one for every 1017 persons. The greatest number of lunatics and idiots, in proportion to the population, is to be found in Rutland, where there is one for every 497 persons, and the smallest number in Lancashire, where there is only one for every 1960 persons. The number of criminal lunatics in England, on the 12th July, 1837, was 178, of whom 138 were confined in asylums, and 40 in gaols.

## ANIMAL CHEMISTRY.

49. *Urea in the Blood in Cholera.*—In a recent Number of *Poggendorf's Annals*, it is stated that MARCHAND detected slight indication of the presence of *Urea* in the blood of a patient who was affected with cholera, and who had not passed urine for three days. Still more recently Dr. HARRY RAINY, of Glasgow, has distinctly detected urea in the blood of a patient who had died with all the symptoms of Asiatic cholera. The patient, a female, was ill eleven days, during which only 36 ounces of urine was secreted, including a small quantity found in the bladder after death. The blood analyzed was taken from the larger vessels and heart.

There was detected rather more than one grain of urea in each ounce measure of blood.—*London Medical Gazette*, 1839.

50. *Analysis of the Liquor Amnii*.—Dr. G. O. REES has made a chemical examination of the liquor amnii in four cases, obtained at the 7 1-2 month of intero-gestation. The results show that this fluid varies greatly in proportional constitution in different individuals, at the same period of utero-gestation, so that, like all the secretions of the body, it is affected by the temperament and diathesis of the mother. The specific gravity of the secretions, however, varied but little in the specimens examined by Dr. Rees (1007. to 1008.6), a precaution, he thinks, on the part of nature to preserve a medium of fixed power to oppose the motions of the fetus in utero.

The experiments of Dr. Vogt, of Berne, (see this Journal for Nov. 1837, p. 219,) would lead us to suppose that there is a great variation in the density of the fluid at different periods. Dr. Rees does not regard those experiments as conclusive, as there is a want of proper relation between the solid contents and specific gravity of the fluids, as given by the Swiss chemist.—*Guy's Hospital Reports*, Oct. 1838.

## MISCELLANEOUS.

51. *Reraccination*.—Upon this important subject, which is at present very much agitated in France, there is an interesting memoir by M. DEZEIMERIS, in *L'Experience Journ. de Méd. et Chirurg.* for December last.

According to this writer, the idea that the preservative effects of vaccination have but a limited duration, and that it may be necessary to renew its impressions, at longer or shorter periods, is founded upon two fundamental facts:—

1. Variola, although a preservative from variola, does not afford an infallible and ever-enduring protection from the same disease. Repetitions of variola are never observed following each other closely, but with long intervals from the first attacks. The preservative power is, therefore, at its highest degree, immediately after the body has been exposed to the principle of the disease, and gradually becomes weaker in proportion to the length of time elapsing after this epoch.

2. The practice of inoculation for small pox has shown, that the variolous virus produces a milder form of disease than that resulting when taken the natural way; that the virus becomes milder and milder in the course of successive transplantations; from all which it seems reasonable to conclude that in losing strength during successive reproductions, it also loses its protective power.

Upon these grounds it is allowable to presume that vaccination, the resemblance of which to variola is so striking, must be subjected to similar laws. It is naturally to be doubted whether the preservative power of vaccination ought to be regarded as absolutely unalterable, and it may be presumed that the virus obtained from the cow would become more and more feeble after successive transplantations through the human system. Prudence would, therefore, seem to dictate the necessity of returning from time to time to the original source of the vaccine virus.

Now these conclusions were entertained by the first originators and promoters of vaccination, and promulgated by Jenner himself. But it has been chiefly since the year 1820, from which period so many epidemics have prevailed, calculated to throw doubts upon the question of the infallibility and unalterability of the preservative powers of vaccination and variola, that the greatest number of authors have occupied themselves upon the question of revaccination.

M. Dezeimeris commences his examination of the evidences upon this subject, by reference to the documents furnished by the northern countries of Europe. A few estimates, taken from the Copenhagen bills of mortality, will prove more than all reasoning upon the subject, the degree of preservative power exerted by